

**A NEW GENUS AND A NEW SPECIES OF LEPTOSCELIDINI
(HETEROPTERA: COREIDAE) FROM COSTA RICA**

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Abstract.—*Sephinioides ugaldei* new genus and new species from Costa Rica are described in the tribe Leptoscelidini (Coreidae). Habitus view illustrations and drawings of the male and female genitalia are provided to help distinguish these taxa. Key to the known Leptoscelidini from Costa Rica is provided.

Key Words: Insecta, Heteroptera, Leptoscelidini, Coreidae, new genus, new species, Costa Rica

Members of the tribe Leptoscelidini are found primarily in the tropical and subtropical regions of the Western Hemisphere, reaching their greatest diversity in Colombia and Brasil. The species are usually medium sized, elongate, head porrect and produced forward between bases of antennae; femora usually armed and tibiae simple, cylindrical, lacking foliaceous dilations.

The tribe contains 9 genera and about 43 species: *Amblyomia* Stål (1), *Coribergia* Casini (1), *Dalmatomammurius* Brailovsky (6), *Kalinckascelis* Brailovsky (1), *Leptoscelis* Laporte (18), *Malvana* Stål (4), *Malvanaoides* Brailovsky (2), *Phthia* Stål (8) and *Plunentis* Stål (2) (Bergroth 1913, Blöte 1936, Brailovsky 1989, 1990a, b, 1993, Lethierry and Severin 1894).

This article adds one new genus and one new species collected in Costa Rica. A striking feature of this new genus is its pronotal disc broadly convex, anteriorly cleft (frontal view), with femora unarmed and humeral angles acutely produced into an elongate spine. With the inclusion of this new taxa, the tribe Leptoscelidini is now represented in Costa Rica by two genera and three species.

The following abbreviations are used for the institutions cited in this paper: INBIO (Instituto Nacional de Biodiversidad, Santo Domingo de Heredia, Heredia, Costa Rica); UNAM (Instituto de Biología, Universidad Nacional Autónoma de México, México D.F.).

All measurements are given in millimeters.

***Sephinioides* Brailovsky, NEW GENUS**

Diagnosis.—*Phthia* Stål, differs from all other members of the tribe, including *Sephinioides*, in having the abdominal spiracle closer to the posterior margin than to the anterior margin of the supporting segment, in all other it is closer to the anterior border.

Sephinioides Brailovsky, new genus, like *Malvana* Stål has the humeral angle projected on a long and acute spine, the triangular processes of the posterior border of the pronotum long and broad, and the antennal segment IV is the longest. *Malvana* can be distinguished by the pale yellow or orange coloration of the body, the humeral angle conspicuously expanded, the femora armed, the antennal segment I

being the shortest, the pronotal disc flat and declivent, the anterolateral border of the pronotum with fine spination, the hemelytral membrane extending slightly beyond the apex of the last abdominal segment and the connexival segment is not elevated above the dorsal segments of the abdomen. In *Sephinioides* the body is black and orange red, the humeral angles not expanded, the femora unarmed, the antennal segment III being the shortest, the pronotal disc broadly convex and anteriorly cleft, anterolateral border coarsely toothed, hemelytral membrane extending far from the apex of the abdomen and the connexival segments higher than abdominal segments.

In *Leptoscelis* Laporte, the femora are armed, the humeral angles never projected in a long and acute spine, the pronotal disc is flat and declivent and the antennal segment IV shorter than III.

In *Malvanaoides* Brailovsky like in *Sephinioides* the antennal segment IV is the longest and the III is the shortest. However, it is differentiated by having the femora armed, the humeral angles never projected in a long and acute spine, by the rostrum reaching the middle third of the abdominal sternite IV and by the blue green to violet iridescence of the body. In the new genus the rostrum barely reaches the posterior border of the hind coxae and the body lacks iridescence.

Generic description.—*Head*: Wider than long, pentagonal, porrect, and produced forward between bases of antennae; tylus unarmed, convex, extending anteriorly to the jugae and slightly raised in lateral view; jugae unarmed, thickened and shorter than tylus; antenniferous tubercle unarmed; antennal segment I much longer than head, thicker than succeeding segments, slightly curving, and external face longitudinally carinate; segments II and III cylindrical, with the external face longitudinally carinate; segment IV fusiform; segment IV longest, segment III shortest and I longer than II; preocellar pit obliquely

deep; ocelli moderately elevated; eyes hemispherical and prominent; postocular tubercle absent to scarcely indicated; buccula short, not extending beyond antenniferous tubercle, with sharp spine anterior projection; rostrum reaching posterior border of hind coxae; rostral segment IV longest, segment III shortest and I longer than II; neck short.

Thorax.—Pronotum wider than long, trapeziform, markedly declivent; disc broadly convex, anteriorly cleft (in frontal view), forming two humps, lateral to the midline; frontal angle conical, crested with spines; collar wide; anterolateral border coarsely toothed, with short and large teeth; humeral angles acutely produced laterad into an elongate spine; posterolateral borders convex and strongly dentate at its upper half, inferior half smooth and slightly concave; triangular processes evident; posterior border straight; callus raised and smooth, except the middle third which is crested. Prosternum with deep excavation; mesosternum with a broad, shallow, medio-longitudinal groove; anterior lobe of metathoracic peritreme elevated and reniform, posterior lobe small.

Legs.—Unarmed; tibiae cylindrical, sulcate; hind tibiae longer than hind femora.

Scutellum.—Triangular, flat, wider than long; apex subacute and slightly convex.

Hemelytra.—Macropterous, extending far from the apex of the last abdominal segment; costal margin emarginate and apical margin weakly concave.

Abdomen.—Connexival segments higher than margin of hemelytron at rest; posterior angle of each connexival segment extended into a short and acute or blunt spine; abdominal spiracle closer to anterior border.

Integument.—Body surface shining and mostly glabrous; pronotum, collar and scutellum strongly punctate and striate; head, clavus, corium and thorax minutely punctate; abdominal sterna and exposed parts of genital segments of both sexes smooth. Antennal segments and legs with long to short decumbent to suberect setae.

Male genitalia.—*Genital capsule*: Posterior margin shallowly concave between short, blunt lateral lobes, intermediate margin shallowly bisinuate at each side of median angular emargination (Fig. 4). Parameres. Shaft robust, with sides almost parallel; apical lobe slightly curved, distally narrowly rounded (Figs. 2, 3).

Female genitalia.—Abdominal sternite VII with plica and fissura; plica noticeably elevated, rectangular, transversely straight and leaving the middle apical third of fissura; gonocoxae I enlarged dorso-ventrally, in caudal view closed, in lateral view straight, with superior half broad and rounded; paratergite VIII triangular, with visible spiracle; paratergite IX squarish, larger than paratergite VIII. Spermatheca. Bulb spherical, duct moderately coiled, flank distinct and chamber elongate (Fig. 5).

Etymology.—Named for its similarity of appearance to *Sephina*; feminine.

Type species.—*Sephinioides ugaldei* Brailovsky, new species.

***Sephinioides ugaldei* Brailovsky,**

NEW SPECIES

(Figs. 1–5)

Description.—Measurements: *Male*: Head length 2.20; interocular space: 1.46; interocellar space 0.67; preocular distance 1.36; width across eyes 2.81; length antennal segments: I, 4.24; II, 3.34; III, 2.35; IV, 7.50. Pronotum: Total length 5.24; width across frontal angles 2.35; width across humeral angles 8.87. Scutellar length 2.41; width 2.73. Hemelytral membrane: Total length 16.50. Abdomen: Maximum width 10.20. Total body length 23.75.

Female: Head length 2.25; interocular space 1.50; interocellar space 0.70; preocular distance 1.46; width across eyes 2.94; length antennal segments: I, 4.54; II, 3.71; III, 2.72; IV, 7.68. Pronotum: Total length 5.54; width across frontal angles 2.41; width across humeral angles 9.80. Scutellar length 2.65; width 2.86. Hemelytral membrane: Total length 17.00. Abdo-

men: Maximum width 10.80. Total body length 26.15.

Male: Dorsal coloration: Including the antennal segments I to IV shining black; hemelytral membrane dark with metallic blue-green iridescens; connexival segments bright orange red, with posterior third of segments II to VI black; dorsal abdominal segments bright orange red. Ventral coloration: Bright orange red, with following areas black: head, rostral segments I to IV, prosternum, mesosternum and metasternum, legs, anterior and posterior lobe of metathoracic peritreme, a huge discoidal spot on pro-meso and thoracic metapleura, anterior third of the upper margin of metathorax, posterior third of pleural sterna II to VI, a huge discoidal spot running lateral to the midline of the abdominal sterna III to VII and a irregular spots on the midline of the abdominal sterna IV to VII.

Female: Coloration: Similar to male. Connexival segments VIII and IX and genital plates bright orange red; dorsal abdominal segments VIII and IX bright orange red, with black irregular spots on the middle third.

Variation.—1—Coxae black with orange hazel reflections. 2—Middle third of the abdominal sterna IV and V entirely bright orange red. 3—Middle third of the abdominal sternite VII with black discoidal spot.

Types.—Holotype: ♂, Costa Rica, Guanacaste Prov., Estación Cacao, SW side of Volcan Cacao (1000–1400 mts.), September 1989, R. Blanco and C. Chavez (INBIO). Paratypes: 6 ♂, 5 ♀, Costa Rica, Guanacaste Prov., Estación Cacao, SW side of Volcan Cacao (1000–1400 mts.), April 1988, July to December 1989, M. Espinoza, R. Blanco and C. Chavez (UNAM, INBIO); 1 ♀, Costa Rica, Guanacaste Prov., Cerro El Hacha, 12 km., SE La Cruz (300 mts.), May 1988, M. Espinoza (INBIO).

Etymology.—Named for Jesus Armando Ugalde Gomez (INBIO).

Distribution.—Known only from the type locality, Costa Rica.

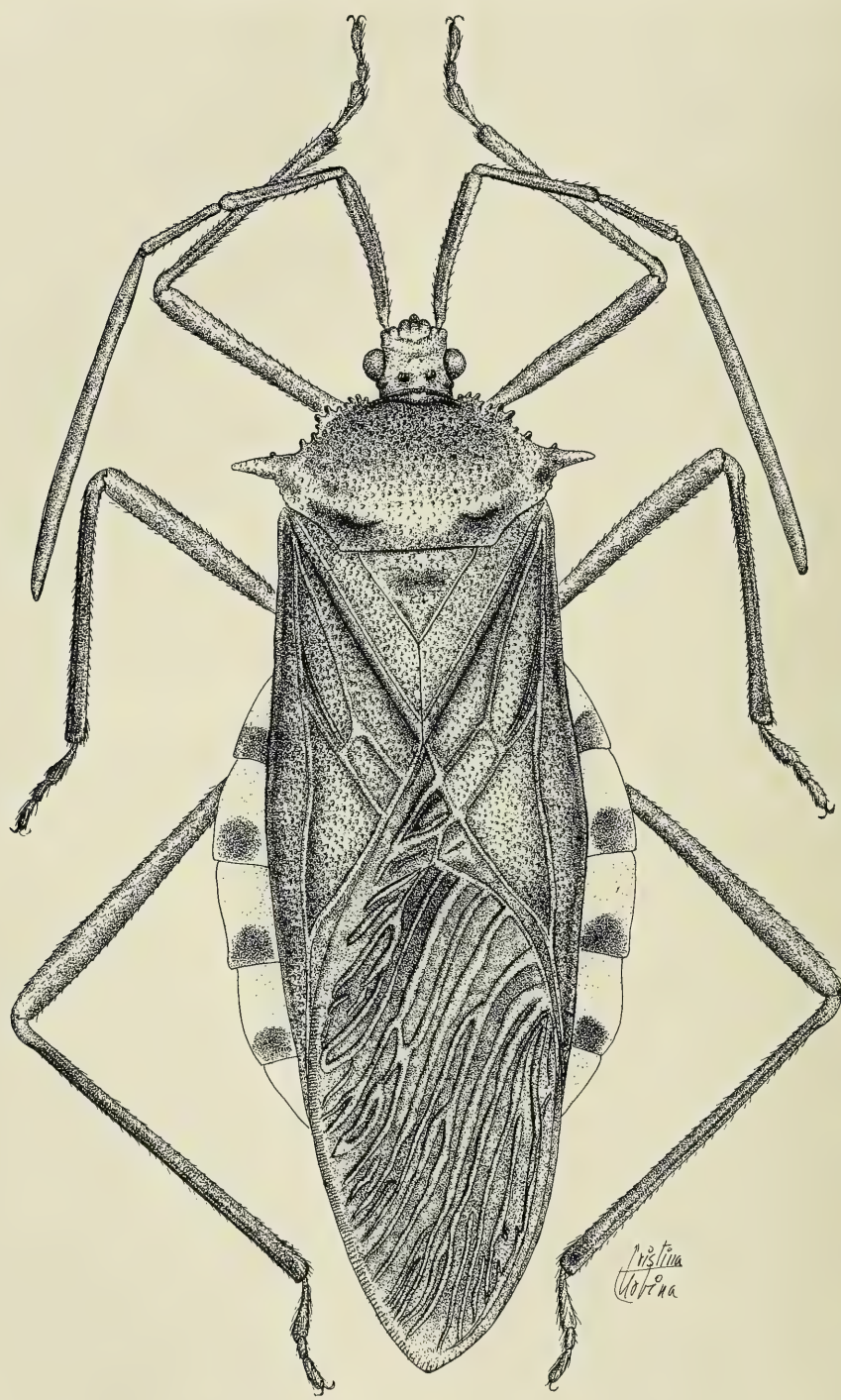
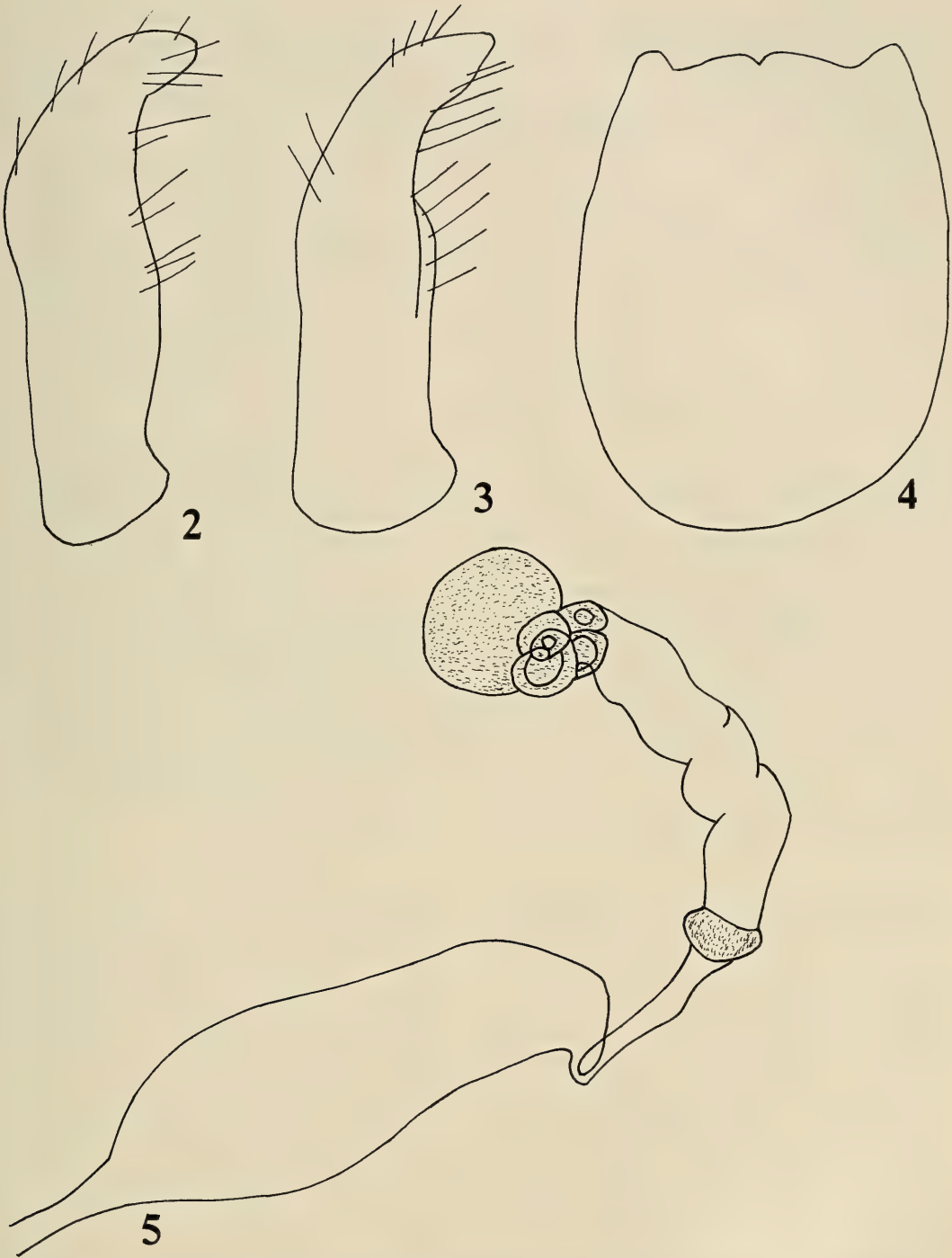


Fig. 1. Dorsal view of *Sephinioides ugaldei*.



Figs. 2–5. *Saphinioides ugaldei*. 2, 3, Parameres. 4, Male genital capsule in caudal view. 5, Spermatheca.

KEY TO THE KNOWN LEPTOSCELIDINI FROM
COSTA RICA

- 1. Abdominal spiracle closer to the anterior border than to the posterior; femora unarmed; pronotal disc broadly convex and anteriorly cleft *Sephinioides ugaldei* Brailovsky
- Abdominal spiracle closer to the posterior border than to the anterior; femora armed; pronotal disc flat, declivent 2
- 2. Body with blue-green iridescence; acetabulae with creamy yellow spot; anterolateral border of the pronotum without spines *Phthia lunata* (Fabricius)
- Body without metallic iridescence; acetabulae black to red-brown; anterolateral border of the pronotum with spines *Phthia picta* (Drury)

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